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(54) Title: ANTI-SPALLING AND HIGH-STRENGTH LIGHTWEIGHT AGGREGATE CONCRETE

(57) Abstract: The present invention relates to a composition comprising: about 28 % to about 42 % by weight of a binder; about 3 % to about 7 % by weight of cenospheres; about 35 % to about 50 % by weight of sand; about 8 % to about 13 % by weight of a lightweight coarse aggregate; about 0.05 % to about 0.5 % by weight of a first fibre; and about 1 % to about 4 % by weight of a second fibre, wherein the total weight of the composition adds to 100 %. The present invention also relates to a method of preparing such a composition and a concrete structure comprising such a composition.

WO 2022/132054 A1